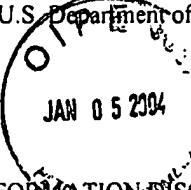


<p style="text-align: center;">U.S. Department of Commerce, Patent and Trademark Office <i>O P E</i> JAN 05 2004 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)</p>	Application No.:	09/974,571
	Filing Date:	October 9, 2001
	First Named Inventor:	Peter G. Borden
	Group Art Unit:	2877
	Examiner Name:	Unknown
	Confirmation No.:	1003
	Attorney Docket No.:	BOX013 US

U.S. Patent Documents							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
<i>PB</i>	1.	4,273,421	6/16/81	Gurtler	356	432	
<i>PB</i>	2.	4,854,710	8/8/89	Opsal et al.	356	432	
<i>PB</i>	3.	4,211,488	7/8/80	Kleinknecht	356	433	
<i>PB</i>	4.	5,379,109	1/3/95	Gaskill et al.	356	445	
<i>PB</i>	5.	6,489,801	12/3/02	Borden et al.	324	766	
<i>PB</i>	6.	5,966,019	10/12/99	Borden	324	752	
<i>PB</i>	7.	5,377,006	12/27/94	Nakata	356	349	
<i>PB</i>	8.	5,706,094	1/6/98	Maris	356	432	
<i>PB</i>	9.	6,118,533	9/12/00	Banet et al.	356	345	
<i>PB</i>	10.	6,323,951	11/27/01	Borden et al.	356	502	
<i>PB</i>	11.	6,426,644	7/30/02	Borden et al.	324	765	
<i>PB</i>	12.	4,952,063	8/27/90	Opsal et al.	356	432	
<i>PB</i>	13.	5,042,952	8/27/1991	Opsal et al.	356	432	
<i>PB</i>	14.	5,159,412	10/27/92	Willenborg et al.	356	445	
<i>PB</i>	15.	5,181,080	1/19/93	Fanton et al.	356	381	
<i>PB</i>	16.	5,228,776	7/20/93	Smith et al.	374	5	
<i>PB</i>	17.	4,255,971	3/17/81	Rosencwaig	73	606	
<i>PB</i>	18.	4,579,463	4/1/86	Rosencwaig et al.	374	57	
<i>PB</i>	19.	4,632,561	12/30/86	Rosencwaig et al.	356	432	
<i>PB</i>	20.	4,636,088	1/13/87	Rosencwaig et al.	374	5	
<i>PB</i>	21.	4,750,822	6/14/88	Rosencwaig et al.	324	445	
<i>PB</i>	22.	4,513,384	4/23/95	Rosencwaig	364	563	
<i>PB</i>	23.	6,049,220	4/11/00	Borden et al.	324	765	
<i>PB</i>	24.	6,483,594	11/19/02	Borden et al.	356	502	
<i>PB</i>	25.	5,652,716	7/29/97	Battersby	703	13	

Examiner: <i>Peter G. Borden</i>	Date Considered: <i>6/10/04</i>
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12	26	5,761,082	6/2/98	Miura-Mattausch	703	14	
13	27	4,996,659	2/26/91	Yamaguchi et al.	714	736	
13	28	6,154,280	11/2/00	Borden	356	376	
13	29	6,054,868	4/25/00	Borden et al.	324	752	
13	30	5,883,518	3/16/99	Borden	324	752	
13	31	5,877,860	3/2/99	Borden	356	376	
13	32	4,652,757	3/24/87	Carver	250	360	
13	33	5,978,074	11/2/99	Opsal et al.	356	72	
13	34	6,211,961	4/3/03	Maris	356	432	
13	35	6,268,916	7/31/01	Lee et al.	356	432	
13	36	6,169,601	1/2/01	Eremin et al.	356	240	
13	37	2002/0126732A1	9/12/02	Shakouri et al.	374	130	
13	38	4,201,087	5/6/80	Akita et al.	73	339	
13	39	2003/96436A1	5/22/03	Satya et al.	438	11	
13	40	6,486,965	11/26/02	Kim	356	626	
13	41	5,741,614	4/21/98	McCoy et al.	430	30	
13	42	6,327,035	12/4/01	Li et al.	356	432	
13	43	5,454,004	9/26/95	Leger	372	99	
13	44	6,281,027	9/28/01	Wei et al.	438	14	
13	45	4,521,118	06/00/85	Rosencwaig	374	5	
13	46	5,074,669	12/1/91	Opsal	356	447	
13	47	5,764,363	6/9/98	Ooki et al.	356	364	
13	48	5,657,754	8/19/97	Rosencwaig	128	633	
13	49	4,634,290	1/6/87	Rosencwaig	374	5	
13	50	4,552,510	6/11/85	Rosencwaig	374	7	
13	51	4,571,685	02/18/86	Kamoshida	364	468	

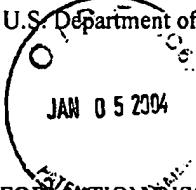
Examiner:	<i>Peter G. Borden</i>	Date Considered:	<i>1/10/04</i>
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	Group Art Unit:	2877
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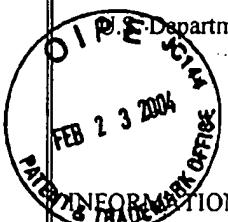
Foreign Patent Documents							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
<i>100</i>	52.	99/94880	12/16/1999	PCT	G01R	31/26		
<i>100</i>	53.	00/07357	3/20/2000	PCT	G01L	21/17		
Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)								
<i>100</i>	54.	Rosencwaig et al. "Detection of Thermal Waves Through Optical Reflectance", Appl Phys. Lett. 46, June 1985, pp1013-1015						
<i>100</i>	55.	Rosencwaig, "Thermal-Wave Imaging", SCIENCE, Volume 218, No. 4569, Oct. 1982, pp.223-228						
<i>100</i>	56.	Opsal et al. "Thermal-Wave Detection and Thin-Film Thickness Measurements with Laser Beam Deflection", Applied Optics, Vol. 22, No. 20, Oct. 1983, pp. 3169-3176						
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<i>100</i>	58.	Constantinos Christofides "Photomodulated Thermoreflectance Investigation of Semiconducting Implanted Wafers," Microelectronic Engineering, 40 (1998), 251-261.						
<i>100</i>	59.	W. L. Smith et al. "Ion Implant Monitoring With Thermal Wave Technology," Nuclear Instruments and Methods Physics Research, B21, (1987), 537-541.						
<i>100</i>	60.	J. Opsal, "High Resolution Thermal Wave Measurements and Imaging of Defects and Damage in Electronic Materials" Photoacoustic and Photothermal Phenomena II, Springer Series in Optical Sciences, Vol. 62, Springer Verlag Berlin, Heidelberg, 1990.						
<i>100</i>	61.	Jon Opsal, "Modulated Interference Effects and Thermal Wave Monitoring of High-Dose Ion Implantation in Semiconductors," Review of Progress in Quantitative Nondestructive Evaluation, Vol. 8B, Plenum Publishing Corporation, 1989.						
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<i>100</i>	63.	Bristow, Thomas C. and Dag Lindquist, "Surface Measurements With A Non-Contact Nomarski-Profilng Instrument", Interferometric Metrology, SPIE vol. 816, August 1987, pages 106-110						
<i>100</i>	64.	"Process Monitoring System", Quantox Product Brochure, 3 pages, published prior to March 1, 2002						
<i>100</i>	65.	A. Rosencwaig, "Thermal Wave Measurement of Thin-Film Thickness", 1986 American Chemical Society, pp.182-191						
<i>100</i>	66.	A. Rosencwaig et al., "Thin-Film Thickness Measurements with Thermal Waves", Journal De Physique, October 1983, pp. C6-483 - C6-489						
<i>100</i>	67.	W. L. Smith et al. "Thermal-wave Measurements and Monitoring of TaSi _x Silicide Film Properties" J. Vac. Technol.B2(4), Oct.-Dec. 1984, pp. 710-713						

Examiner: <i>D. Borden</i>	Date Considered: 6/10/04
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U.S. Department of Commerce, Patent and Trademark Office  INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Application No.: 09/974,571 Filing Date: October 9, 2001 First Named Inventor: Peter G. Borden Group Art Unit: 2877 Examiner Name: Unknown Confirmation No.: 1003 Attorney Docket No.: BOX013 US
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10	68	L. Chen et al., "Thermal Wave Studies of Thin Metal Films Using the Meta-Probe-A New Generation Photothermal System" 25th Review of Progress in QNDE, Snowbird, UT 19-24 July, 1998, pp 1-12
10	69	J. Opsal, "The Application of Thermal Wave Technology to Thickness and Grain Size Monitoring of Aluminum Films", SPIE Vol. 1596 Metalization Performance and Reliability Issues for VLSI and ULSI (1991), pp 120-131
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Examiner: <i>Danny Borden</i>	Date Considered: <i>6/10/04</i>
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 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	Application No.:	09/974,571
	Filing Date:	Oct. 9, 2001
	First Named Inventor:	Peter G. Borden
	Group Art Unit:	2877
	Examiner Name:	Smith, Zandra B.
	Confirmation No.:	1003
	Attorney Docket No.:	BOX013 US

U.S. Patent Documents							
*Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
Y21	1.	2001/0015937	8/23/01	Yamaguchi et al.	369	13	
Y20	2.	6,020,964	2/1/00	Loopstra et al.	356	500	
Y20	3.	6,400,454	6/4/02	Noguchi et al.	356	237	
Foreign Patent Documents							
							Translation
		Document	Date	Country	Class	Subclass	Yes No
Other Art (Including Author, Title, Date, Pertinent Pages, Etc.)							

Examiner:	<i>Drew J. Borden</i>	Date Considered:	<i>6/10/04</i>
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